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Notice of Allowability	Application No.	Applicant(s)	
	10/827,246	HISANAGA ET AL.	
	Examiner	Art Unit	
	Sheldon J. Richter	3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to 4/21/2006.
2. The allowed claim(s) is/are 1 and 13-20.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
 Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the paragraph that begins on page 2, line 10, of the specification as follows:

It is, therefore, an object of the present invention, in view of the above mentioned problems, to provide a fluid machine which can transmit a rotational driving force generated at an expansion device to not only a compressor device but to other devices, and which would not become an obstacle for driving the other devices even in such a case that a sufficient heat energy for the [Rnakine] Rankine cycle can not be obtained.

In the paragraph that begins on pg. 17, line 21, of the specification as follows:

As above, the air-conditioning operation can be continued by making use of the waste heat even [during] when the electric rotating machine 9 is not operated as the electric motor for

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generating the rotational driving force. In addition, energy saving becomes possible by operating the machine 9 as the electric power generating machine. During the above operation, the compressor capacity may be made smaller by making the slant angle of the swash plate 78 to a smaller angle, because the compressor device 7 is operated by only the rotational driving force from the expansion device 4.

In the paragraph that begins on pg. 24, line 10, of the specification as follows:

The fluid machine in this embodiment comprises the expansion device 4, the alternator 8 and the pulley 6, wherein the shaft 21 is commonly [for] connected to the above devices.

In the paragraph that begins on pg. 24, line 13, of the specification as follows:

The pulley 6 is connected to the shaft 21 over a one-way clutch 61. The alternator 8 has a well known construction, in which a stator 83 and a rotor 84 are disposed in a front housing 81 and a rear housing [82] 85. A voltage regulator 86 is disposed in the rear housing [82] 85 and a middle housing [85] 82.

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In the paragraph that begins on pg. 28, line 18, of the specification as follows:

The electric power demand exists not only during an idle-stop period of the engine but also [during] when the engine running is stopped in the other situation. In the case that the electric power from the battery is running short, the electric power generation is necessary and therefore in such a case the expansion device 4 will be operated to drive the alternator 8. This operation is possible so long as there are sufficient amount of waste heat to be collected from the engine, whether or not the engine is running.

In the paragraph that begins on pg. 30, line 2, of the specification as follows:

Since the crank mechanism 58 is disposed between the shaft 21 and the expansion device 4 and the radius of the orbital movement can be varied, the higher sealing effect between the fixed and movable scrolls can be obtained, and the load for driving the expansion device [during] when it is not operated by the Rankine cycle can be minimized.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheldon

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J. Richter whose telephone number is (571) 272-4863. The examiner can normally be reached on M-F from 10:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sheldon J Richter
Primary Examiner
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